



**INFORMATION DISCLOSURE
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APPLICANT
NORTHROP et al.

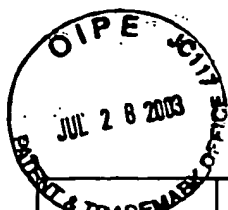
FILING DATE
June 20, 2003

GROUP
~~Unknown~~ 1724

U. S. PATENT DOCUMENTS

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE (MM/DD/YY)	NAME	CLASS	SUBCLASS	FILING DATE
CTB	6,087,159	July 11, 2000	Finn	435	299.1	
	6,068,774	May 30, 2000	Vandenbergh, et al.	210	611	
	6,013,512	January 11, 2000	Turschmid, et al.	435	266	
	5,906,746	May 25, 1999	Helmo, et al.	210	614	
	5,755,852	May 26, 1998	Northrop	71	9	
	5,733,454	March 31, 1998	Cummings	210	603	
	5,700,370	December 23, 1997	Helmo	210	94	
	5,538,529	July 23, 1996	Northrop	71	9	
	5,506,096	April 9, 1996	Helmo	435	3	
	5,472,472	December 5, 1995	Northrop	71	9	
	5,447,633	September 5, 1995	Matsche, et al.	210	605	
	5,248,422	September 28, 1993	Neu	210	605	
	5,078,882	January 7, 1992	Northrop	210	602	
	4,780,208	October 25, 1988	Böhnke, et al.	210	605	
	4,721,569	January 26, 1988	Northrop	210	607	
	4,487,697	December 11, 1984	Böhnke, et al.	210	605	
	4,292,328	September 29, 1981	Coulthard, et al.	426	2	
	4,179,374	December 18, 1979	Savage, et al.	210	151	
	6,350,350	February 26, 2002	Jensen et al.	162	141	
	6,190,566	February 20, 2001	Kolber, Steven N.	119	447	
	4,540,666	September 10, 1985	Nukina et al.	435	166	
	5,338,452	August 16, 1994	Pidaparti, Surya R.	210	188	
	6,312,599	November 6, 2001	Reid, John H.	210	605	
	5,783,081	July 21, 1998	Gaddy, James L.	210	603	
	6,068,774	May 30, 2000	Vandenbergh et al.	210	611	
	6,106,716	August 22, 2000	Berkman	210	603	
CTB	5,603,744	February 18, 1997	Kuerner	71	9	

CTB 4/5/05



FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE (MM/DD/YY)	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
CTB	1245434	September 8, 1971	GB				
CTB	WO9010083	July 9, 1990	Helmo (DK)				

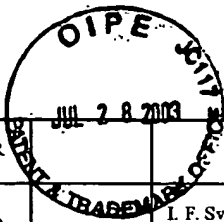
OTHER DOCUMENTS

EXAMINER INITIAL	AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.	
CTB	Astrid A. Van de Graaf et al., "Autotrophic growth of anaerobic ammonium-oxidizing micro-organisms in a fluidized bed reactor," Microbiology (UK), 142:2187-2196 (1996)	
	Metcalf & Eddy, "Wastewater Engineering - Treatment, Disposal, Reuse (Third Edition)" p512-518 (1991)	
	M. Fuerhacker et al., "Approach for a novel control strategy for simultaneous nitrification/denitrification in activated sludge reactors," Water Research, 34 (9): p2499-2506 (June 2000)	
	C. Collivignarelli et al., "Simultaneous nitrification-denitrification processes in activated sludge plants: Performance and applicability," Water Science and Technology, 40 (4-5): p187-194 (Aug.-Sept., 1999)	
	Klangduen Pochana et al., "Study of factors affecting simultaneous nitrification and denitrification (SND)," Water Science and Technology, 39 (6): p61-68 (March, 1999)	
	Hong W. Zhao et al., "Controlling factors for simultaneous nitrification and denitrification in a two-stage intermittent aeration process treating domestic sewage," Water Research, 33 (4): p961-970 (March 1998)	
	Hyungseok Yoo et al., "Nitrogen removal from synthetic wastewater by simultaneous nitrification and denitrification (SND) via nitrite in an intermittently-aerated reactor," Water Research, 33 (1): p145-154 (January, 1999)	
	Bent Halling-Sorensen et al., "A model of nitrogen removal from waste water in a fixed bed reactor using simultaneous nitrification and denitrification (SND)," Ecological Modelling, 87 (1-3): p131-141 (1996)	
	Anders O. Wistrom et al., "Enhanced nutrient removal by limiting dissolved oxygen concentration in a continuously fed, intermittently decanted, activated sludge plant," Environmental Technology, 17 (4): p371-380 (1996)	
	Elisabeth V. Munch et al., "Simultaneous nitrification and denitrification in bench-scale sequencing batch reactors," Water Research, 30 (2): p277-284 (1996)	
	Eberhard Bock et al., "Nitrogen loss caused by denitrifying Nitrosomonas cells using ammonium or hydrogen as electron donors and nitrite as electron acceptor," Archives of Microbiology, 163 (1): p16-20 (1995)	
	Chung-Min Liao et al., "Nitrification/denitrification in an intermittent aeration process for swine wastewater," Journal of Environmental Science and Health Part B Pesticides Foods Contaminants and Agricultural Wastes, 29 (5): p1053-1078 (1994)	
	G. Bortone et al., "Nitrification and denitrification in activated-sludge plants for pig slurry and wastewater from cheese dairies," Bioresource Technology, 37 (3): p243-252 (1991)	
	F. Carta et al., "Aerobic purification of dairy wastewater in continuous regime; reactor with support," Process Biochemistry, V34, N6-7 (SEP), p613-619 (1999)	
	F. Beline et al., "Factors affecting nitrogen transformations and related nitrous oxide emission from aerobically treated piggery slurry," Journal of Agricultural Engineering Research, V73, N3 p235-243 (July 1999)	
	K. Yoo et al., "Nitrogen removal from synthetic wastewater by simultaneous nitrification and denitrification (SND) via nitrite in an intermittently-aerated reactor," Water Research, V33, N1 p145-154 (January 1999)	
	C. Helmer et al., "Simultaneous nitrification/denitrification in an aerobic biofilm system," Water Science and Technology, V37, N4-5, p183-187 (1998)	
	S. Okabe et al., "Relationship between population dynamics of nitrifiers in biofilms and reactor performance at various C:N ratios," Water Research, V30, N7 p1563-1572 (July 1996)	
	JR Bicudo et al., "Intermittent aeration of pig slurry - farm scale experiments for carbon and nitrogen removal," Water Science and Technology, V32, N12, p83-90 (1995)	
CTB	Y. Watanabe et al., "Simultaneous removal of organic materials and nitrogen by micro-aerobic biofilms," Water Science and Technology V31, N1, p195-203 (1995)	

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CHESTER T. BARRY
PRIMARY EXAMINER

2/5/05



EXAMINER INITIAL	AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.
CTB	I. F. Svoboda et al., "Nitrogen removal from pig slurry by nitrification and denitrification," American Society Agricultural Engineers Seventh International Symposium on Agric. & Food Processing Wastes p24 (June 18-20, 1995)
	H. Bennemann et al., "Simultaneous nitrification and denitrification in a single step unit," Conference Title: DECHEMA biotechnology conferences - Lectures at the 7th DECHEMA annual meeting of biotechnologists, Frankfurt am Main, Germany, p1011-1014 (May 30-31 1989)
	J. Dufay et al., "Simultaneous nitrification/denitrification in constructed wetlands," Joint Conference on the Environment, p85-90 (March 1988)
	K. M. Ho et al., "The importance of simultaneous nitrification-denitrification in Biological Nutrient Removal activated Sludge Systems with low F/M bulking control," Australian Conference on Biological Nutrient Removal from Wastewater, 1994; 2nd p365-374 (AWWA) (1995)
	H. Hvidfeldt Rasmussen et al., "Treatment of odorous nitrogen compounds in a bioscrubber comprising simultaneous nitrification and denitrification," Symp. On Biological Waste Gas Cleaning, Heidelberg, Germany, (March 9-11, 1994)
	Hao Xiaodi, et al., "Removing nitrate and ammonium from drainage water by simulation of natural biological processes" Water Research v. 32 no3 p936-43 (March. 1998)
	P. J. Hird, "Wastewater treatment with zero dissolved oxygen," 1998 National Conference on Environmental Engineering (June 7-10, 1998)
	Harald Horn, "Simultane Nitrifikation und Denitrifikation in einem hetero-/autotrophen Biofilm unter Berücksichtigung der Sauerstoffprofile" (English Abstract Enclosed - Simultaneous nitrification and denitrification in a hetero/autotrophic biofilm in concern to the oxygen gradient" GWF (DasGas - und Wasserfach) Wasser - Abwasser (Germany) v 133:6, p287-292 (Juni 1992)
	P. Harremoës et al., "Evaluation of Methods for Nitrogen and Phosphorous Control in Sewage Effluents," Journal of the Institute of Water and Environmental Management, Supplementary European Issue, p50-61 (March 1992)
	USEPA, <i>Manual: Nitrogen Control</i> (1993), Office of Research and Development, EPA/625/R-93/010, Washington, DC, p. 86-87, 101-103.
	"Anaerobic Digester at Craven Farms," www.energy.state.or.us/biomass/digester/craven.htm downloaded 6/20/02, last modified 6/20/02.
CTB	Course Syllabus, MB302 (General Microbiology, Oregon State University, Fall 2001, http://www.orst.edu/instruct/mh302/field/Lecture7/Lecture7.htm , downloaded 6/20/02, date of last modification (unknown)

EXAMINER CHESTERT T. BARRY	DATE CONSIDERED 2/5/05
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